

### **Price Redetermination,**

The IID-SDCWA contract has a provision which may prove to be very damaging to IID landowners's water rights. It is the Price Redetermination provision contained in Article 5 and further explained in Exhibit E of the contract. This price redetermination procedure was included in the contract by IID over the objections of many farmers and landowners who contended it could cause a damaging reduction in the price of water they conserve for transfer.

This provision can be invoked by either party anytime after 10 years, if certain minimum water market conditions are satisfied. It uses a multiple regression analysis formula to establish a price based on certain characteristics of other recent transfers.

Three characteristics must be taken into account. They are 1) water quality measured in "TDS", 2) "reliability" of the supply, and 3) "vintage" or how recently the transfer and price were put into effect. Other characteristics may be added under certain circumstances.

"Vintage" measures price change trends over time—the rate of inflation or deflation. The other two characteristics measure water factors; Total Dissolved Solids, and how likely it is that the full amount of water will be transferred **every** year of the contract.

None of the contract-mandated characteristics measures how the water is conserved. The way the water is conserved is usually a major determinant of how expensive the water will be. Yet whether the water is made available for transfer by fallowing farmland, storage and subsequent retrieval, collection and impoundment, or salvage is not taken into account by the price redetermination procedure.

Our water's characteristics are peculiar to Lower Colorado River water, both in quality and reliability of supply. Other water transferred from the LCR will have very similar characteristics. The regression analysis formula will give much greater weight to prices of any transferred LCR water, in many cases almost completely ignoring the prices of other transferred water. This means that our price, under price redetermination, would very likely be set almost exclusively by the prices of transferred LCR water. This is true even if as few as one or two of the transfers used in the price redetermination procedure involves LCR water.

Most other LCR water users receive credits for their return flows. This means that the water they might transfer would need to be conserved by reductions in farming (fallowing), or storage and retrieval. Since these are among the cheapest methods of conserving water, IID's price would likely be reset downward to near the price of fallowed water &/or water that is retrieved from storage.

IID's contract prohibits farmers from conserving the water by fallowing. It thereby **requires** them to use considerably more expensive methods of conservation. Therefore IID water users could be forced to provide conserved water at below the cost of conservation for as many as 65 of the 75 years of the contract.

A few exhibits should demonstrate the above-referenced features of the price redetermination procedure. Evidence Item # E-1, shows the result when 10 sample transactions are used to determine the expected value of IID's water. Evidence Item # E-2 shows what happens to the expected value of IID's water when the price of one of the same 10

transactions is doubled to \$ 206, the expected value of IID's water declines by \$ 170.

Evidence Item # E-3 shows what happens when only two of the ten sample transactions represent LCR water. The expected value of IID water is very near the average price of the two LCR water transactions. Evidence Item # E-4, shows what happens when the prices of only the two transactions representing LCR water are increased by \$100. The expected value of IID's water increases by \$ 123. Evidence Item # E-5 shows what happens when, instead of increasing the two LCR transaction prices, the prices of all of the other 8 transactions are increased by \$100 each. In this case the expected value of IID's water decreases by \$13.

While we can not know for sure what the future will bring, we can be sure that there is great uncertainty about what will happen if the price redetermination feature of the contract is implemented. We can be confident that if transfers involving LCR water are included in the process, IID's price will closely reflect the prices of those transfers. This can be very detrimental to Imperial Valley farmers and landowners and their water rights.

# # E-1 Reprice.No.Colo.R

Agreement Valuation Band			Findings of Regression Study			
Lower Limit	\$314	Parameter	Coefficient	Std Dev	T-Statistic	P-Value
Upper Limit	\$373		6.3033	2.145	2.94	0.0260
Expected Value of IID Water		Constant				
		Reliability	0.7697	0.3105	2.48	0.0479
		TDS	-0.0710	0.3713	-1.9	0.8545
	\$342	Vintage	-0.0443	0.0253	-1.72	0.1366
		R2	0.6118			
IID Characteristics		Sigma	0.1331			
Reliability	0.9900					0.005 : Reliability -0.09
TDS Quality	650	Colo R.				
Vintage	0					
		* NONE *				
Data from Eligible Transactions						
Transaction	Net Value	Reliability	TDS	Vintage	Value	Prediction Interval Parameter
1	237	0.7000	382	3	271	Reliability 20%
2	206	0.6000	310	6	269	Reliability 80%
3	260	0.7000	272	1	272	Student T
4	236	0.7000	369	4	282	Significance 0.3265
5	316	0.9000	337	5	394	Expected 5.835
6	330	0.9000	300	3	377	
7	208	0.6000	370	4	248	
8	202	0.8000	283	7	273	
9	214	0.8000	322	5	267	
10	227	0.8000	371	3	259	
	243.6	0.7500	331.6	4.1	291.4	

# #E-2 Reprice.No.Colo.R

Agreement Valuation Band			Findings of Regression Study			
Lower Limit	\$144	Parameter	Coefficient	Std Dev	T-statistic	P-Value
Upper Limit	\$206	Constant	8.6076	4.4453	1.94	0.1010
Expected Value of IID Water		Reliability	-0.0912	0.6434	-0.14	0.8920
		TDS	-0.5339	0.7685	-0.69	0.5132
		Vintage	0.0027	0.0534	0.05	0.9611
		\$172				
		R2	0.0763			
IID Characteristics		Sigma	0.2756		TDS : Reliability	5.86
Reliability	0.9900					
TDS Quality	650	Colo R.			State Water Project Water	
Vintage	0				Avg "0" yr	Price
		* NONE *	\$261	\$264.20	Reliability	TDS
				"0" year		Vintage
Data from Eligible Transactions						
Transaction	Net Value	Reliability	TDS	Vintage	Value	Prediction Interval Parameter
1	237	0.7000	382	3	235	Rule 20%
2	412	0.6000	310	6	405	Alpha 80%
3	260	0.7000	272	1	259	Student T 0.2648
4	236	0.7000	369	4	233	Sigma 0.6764
5	316	0.9000	337	5	312	Expected 5.150
6	330	0.9000	300	3	327	
7	208	0.6000	370	4	206	
8	202	0.8000	283	7	198	
9	214	0.8000	322	5	211	
10	227	0.8000	371	3	225	
	264.2	0.7500	331.6	4.1	261.2	

Agreement Valuation Band			Findings of Regression Study			
Lower Limit	\$219	Parameter	Coefficient	Std Dev	T-statistic	P-Value
Upper Limit	\$251	Constant	9.5582	1.3659	7.00	0.0004
		Reliability	0.6324	0.4115	1.54	0.1752
Expected Value of IID Water		TDS	-0.6323	0.2206	-2.87	0.0286
	\$234	Vintage	-0.0613	0.0329	-1.86	0.1118
		R2	0.6582			
IID Characteristics		Sigma	0.1656		Colo effect	93%
Reliability	0.9900	Exp value of IID / avg "0" yr price				
TDS Quality	650	Colo R. price				78%
Vintage	0	Average	Avg "0" yr	Price	Reliability	TDS
		\$175	\$228	\$249	0.7750	328
Data from Eligible Transactions		Vintage				4.00
Transaction	Net Value	Reliability	TDS	"0" year Value	Prediction Interval	Parameter
1	200	0.9900	650	240	Rule	20%
2	150	0.9900	595	217	Alpha	80%
3	260	0.7000	272	276	Student T	0.2648
4	236	0.7000	369	302	Sigma	0.2527
5	316	0.9000	337	429	Expected	5.457
6	330	0.9000	300	397		
7	208	0.6000	370	266		
8	202	0.8000	283	310		
9	214	0.8000	322	291		
10	227	0.8000	371	273		

Agreement Valuation Band		Findings of Regression Study			
Lower Limit	\$340	Parameter	Coefficient	Std Dev	T-statistic
Upper Limit	\$376	Constant	6.6347	1.0258	6.47
		Reliability	0.9112	0.3090	2.95
Expected Value of IID Water		TDS	-0.1154	0.1657	-0.70
	\$357	Vintage	-0.0572	0.0247	-2.32
		R2	0.6719		0.0598
IID Characteristics		Exp value of IID / avg "0" yr price			
Reliability	0.9900	0.1243			
TDS Quality	650	State Water Project Water			
Vintage	0	Average	Avg "0" yr	Price	Reliability
		\$275	\$354	\$249	0.7750
Data from Eligible Transactions		"0" year			
Transaction	Net Value	Reliability	TDS	Vintage	Prediction Interval Parameter
1	300	0.9900	650	3	Rule
2	250	0.9900	595	6	Alpha
3	260	0.7000	272	1	Student T
4	236	0.7000	369	4	Sigma
5	316	0.9000	337	5	Expected
6	330	0.9000	300	3	
7	208	0.6000	370	4	
8	202	0.8000	283	7	
9	214	0.8000	322	5	
10	227	0.8000	371	3	

# #E-5 Base Case

Agreement Valuation Band			Findings of Regression Study					
Lower Limit	\$205		Parameter	Coefficient	Std Dev	T-statistic	P-Value	
Upper Limit	\$238		Constant	11.6040	1.5228	7.62	0.0003	
Expected Value of IID Water			Reliability	0.1879	0.4587	0.41	0.6962	
			TDS	-0.9578	0.2460	-3.89	0.0080	
			Vintage	-0.0462	0.0367	-1.26	0.2548	
			R2	0.7819				
IID Characteristics			Signa	0.1846	Colo. R. effect		96%	
Reliability	0.9900			Exp value of IID / avg "0" yr price				58%
TDS Quality	650	Colo R. price		State Water Project Water				
Vintage	0	Average	Avg "0" yr	Avg "0" yr	Price	Reliability	TDS	Vintage
		\$175	\$214	\$420	\$349	0.7750	328	4.00
Data from Eligible Transactions								
Transaction	Net Value	Reliability	TDS	Vintage	"0" yr Price	Prediction Interval Parameters		
1	200	0.9900	650	3	230	Rule	20%	
2	150	0.9900	595	6	198	Alpha	80%	
3	360	0.7000	272	1	377	Student T	0.2648	
4	336	0.7000	369	4	404	Sigma	0.2817	
5	416	0.9000	337	5	524	Expected	5.398	
6	430	0.9000	300	3	494			
7	308	0.6000	370	4	370			
8	302	0.8000	283	7	417			
9	314	0.8000	322	5	396			
10	327	0.8000	371	3	376			
Averages	314.3	0.818	386.9	4.1	379			